

Title (en)
Curable dental composition and dental system

Title (de)
Aushärtbare Dentalzusammensetzung sowie Dentalsystem

Title (fr)
Composition dentaire durcissable et système dentaire

Publication
EP 1245219 A1 20021002 (DE)

Application
EP 02005841 A 20020314

Priority
DE 10115001 A 20010326

Abstract (en)
The hardening of a (meth)acrylate-containing dental composition uses 420-520 nm blue light from a LED with a photoinitiator system comprising (A) camphorquinone and/or phenanthrenequinone and (B) 1-phenyl-1,2-propanedione combined with (C) a reducing amine. <??>An Independent claim is also included for a dental system comprising the (meth)acrylate-containing dental composition and an LED-fed device with a 420-520 nm emission spectrum.

Abstract (de)
Es wird ein Verfahren zum Aushärten einer (meth)acrylat-haltigen Dentalzusammensetzung beschrieben, bei dem als Photoinitiatorsystem a) Campherchinon und/oder Phenanthrenchinon und b) 1,-Phenyl-1,2 Propandion und/oder ein ähnliches Diketon und/oder Phosphinoxid, c) kombiniert mit einem reduzierenden Amin verwendet wird und mit blauem Licht aus einer LED-Quelle der Wellenlänge von 420 - 520 nm bestrahlt wird.

IPC 1-7
A61K 6/083; **C08F 2/50**

IPC 8 full level
A61K 6/083 (2006.01); **C08F 2/50** (2006.01)

CPC (source: EP)
A61K 6/62 (2020.01); **A61K 6/887** (2020.01); **C08F 2/50** (2013.01)

C-Set (source: EP)
A61K 6/887 + **C08L 33/00**

Citation (search report)
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• [Y] EP 0880945 A2 19981202 - ESPE DENTAL AG [DE]
• [A] STAHL F ET AL: "Light-emitting diode (LED) polymerisation of dental composites: flexural properties and polymerisation potential", BIOMATERIALS, ELSEVIER SCIENCE PUBLISHERS BV., BARKING, GB, vol. 21, no. 13, July 2000 (2000-07-01), pages 1379 - 1385, XP004197555, ISSN: 0142-9612
• [A] WHITTERS C J ET AL: "CURING OF DENTAL COMPOSITES BY USE OF INGAN LIGHT-EMITTING DIODES", OPTICS LETTERS, OPTICAL SOCIETY OF AMERICA, WASHINGTON, US, vol. 24, no. 1, 1999, pages 67 - 68, XP000801373, ISSN: 0146-9592

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